AMENDMENTS TO THE CLAIMS

1. (Original) A method for transmitting packet data and side information including a sequence number of the packet data in a CDMA (Code Division Multiple Access) mobile communication system employing a HARQ (Hybrid Automatic Repeat reQuest) scheme for performing retransmission in response to a retransmission request message after an initial transmission, comprising the steps of:

transmitting the packet data and the side information over a common channel when performing the initial transmission; and

retransmitting the packet data and the side information over a dedicated channel.

2. (Original) The method as claimed in claim 1, wherein the common channel is a physical downlink shared channel (DSCH).

3. (Original) The method as claimed in claim 1, wherein the dedicated channel is a dedicated physical channel (DPCH).

4. (Original) A method for transmitting packet data and side information including a sequence number of the packet data in a CDMA mobile communication system employing a HARQ scheme for performing retransmission in response to a retransmission request message after an initial transmission, comprising the steps of:

transmitting the packet data over a dedicated channel; and

transmitting the side information over a common channel.

5. (Original) The method as claimed in claim 4, wherein the dedicated channel is a dedicated physical channel (DPCH).

6. (Original) The method as claimed in claim 4, wherein the common channel is a physical downlink shared channel (DSCH).

7. (Original) A method for transmitting packet data and side information including a sequence number of the packet data in a CDMA mobile communication system employing a HARQ scheme for performing retransmission in response to a retransmission request message after an initial transmission, comprising the steps of:

transmitting the packet data and the side information over a dedicated channel during the initial transmission; and

retransmitting the packet data and the side information over a common channel during the retransmission.

8. (Original) The method as claimed in claim 7, wherein the dedicated channel is a dedicated physical channel (DPCH).

9. (Original) The method as claimed in claim 7, wherein the common channel is a physical downlink shared channel (DSCH).

10. (Original) A method for transmitting packet data and side information including a sequence number of the packet data in a CDMA mobile communication

system employing a HARQ scheme for performing retransmission in response to a retransmission request message after an initial transmission, comprising the steps of:

transmitting the packet data and the side information over a first dedicated channel during the initial transmission; and

transmitting the packet data and the side information over a second dedicated channel during the retransmission, the second dedicated channel being different from the first dedicated channel.

11. (Original) The method as claimed in claim 10, wherein the dedicated channel is a dedicated physical channel (DPCH).

12. (Currently Withdrawn) A method for processing packet data in a mobile communication system in which a receiver including an RLC (Radio Link Control) layer, a MAC (Medium Access Control) layer and a physical layer, processes packet data received from a transmitter, the packet data and side information including a sequence number, comprising the steps of:

storing the packet data and transmitting the side information to the RLC layer through the MAC layer upon the physical layer's receiving the packet data and the side information from the transmitter;

transmitting a sequence number of the packet data, included in the side information, to the physical layer upon the RLC layer's receiving the side information; and

processing the stored packet data matching with the received sequence number and transmitting the processed packet data to the RLC layer through the MAC layer upon the physical layer's receiving the sequence number.

13. (Currently Withdrawn) A HARQ method in a CDMA mobile communication system including a transmitter RLC layer for transmitting packet data generated in an upper layer to a receiver physical layer, said receiver physical layer for receiving the packet data and storing the received packet data, and a receiver RLC layer for detecting the packet data received at the receiver physical layer, comprising the steps of:

transmitting a primitive from the receiver RLC layer to the receiver physical layer, the primitive including an indicator indicating that packet data is stored in the receiver physical layer and also including a sequence number of the stored packet data; and

processing packet data matching with the sequence number and transmitting the processed packet data from the receiver physical layer to the receiver RLC layer upon the receiver physical layer's receiving the primitive.

14. (Currently Withdrawn) A HARQ method in a CDMA mobile communication system including a transmitter RLC layer for transmitting packet data generated in an upper layer to a receiver physical layer, said receiver physical layer for receiving the packet data and storing the received packet data, and a receiver MAC layer and a receiver RLC layer for detecting the packet data received at the receiver physical layer, comprising the steps of:

transmitting a first primitive from the receiver RLC layer to the receiver MAC layer, the first primitive including an indicator indicating that packet data is stored in the receiver physical layer and also including a sequence number of the stored packet data;

transmitting a second primitive from the receiver MAC layer to the receiver physical layer upon the receiver MAC layer's receiving the first primitive, the second primitive including an indicator indicating that packet data is stored in the receiver physical layer and also including a sequence number of the stored packet data; and

processing packet data matching with a sequence number included in the second primitive and transmitting the processed packet data from the receiver physical layer to the receiver RLC layer upon the receiver physical layer's receiving the second primitive.

15. (Currently Withdrawn) A method for transmitting packet data and side information including a sequence number of the packet data in a CDMA mobile communication system employing a HARQ scheme for performing retransmission in response to a retransmission request message after an initial transmission, comprising the steps of:

performing a first channel-processing of the packet data through a first transport channel and a first channel-processing of the side information through a second transport channel during the initial transmission;

multiplexing the first channel-processed packet data and side information and transmitting the multiplexed information over a dedicated channel during the initial transmission;

performing a second channel-processing of the side information through the second transport channel and a second channel-processing of the packet data through a third transport channel during the retransmission; and

multiplexing the second channel-processed packet data and side information and transmitting the multiplexed information over the dedicated channel during the retransmission.

16. (Currently Withdrawn) The method as claimed in claim 15, wherein the dedicated channel is a dedicated physical channel (DPCH).

17. (Currently Withdrawn) The method as claimed in claim 15, wherein the second transport channel has a priority higher than a priority of the first and third transport channels.

18. (Currently Withdrawn) A method for transmitting packet data and side information including a sequence number of the packet data in a CDMA mobile communication system employing a HARQ scheme for performing retransmission in response to a retransmission request message after an initial transmission, comprising the steps of:

performing a first channel-processing of the packet data through a first transport channel and a first channel-processing of the side information through a second transport channel during the initial transmission;

multiplexing the first channel-processed packet data and side information and transmitting the multiplexed information over a dedicated channel during the initial transmission;

performing a second channel-processing of the packet data through a third transport channel and a second channel-processing of the side information through a fourth transport channel during the retransmission; and

multiplexing the second channel-processed packet data and side information and transmitting the multiplexed information over a common channel during the retransmission.

19. (Currently Withdrawn) The method as claimed in claim 18, wherein the dedicated channel is a dedicated physical channel (DPCH).

20. (Currently Withdrawn) The method as claimed in claim 18, wherein the common channel is a physical downlink shared channel (DSCH).

21. (Currently Withdrawn) A method for transmitting packet data and side information including a sequence number of the packet data in a CDMA mobile communication system employing a HARQ scheme for performing retransmission in response to a retransmission request message after an initial transmission, comprising the steps of:

performing a first channel-processing of the packet data through a first transport channel and a first channel-processing of the side information through a second transport channel during the initial transmission;

multiplexing the first channel-processed packet data and side information and transmitting the multiplexed information over a dedicated channel during the initial transmission;

performing a second channel-processing of the packet data through a third transport channel and a second channel-processing of the side information through a fourth transport channel during the retransmission; and

multiplexing the second channel-processed packet data and side information and transmitting the multiplexed information over the dedicated channel during the retransmission.

22. (Currently Withdrawn) The method as claimed in claim 21, wherein the dedicated channel is a dedicated physical channel (DPCH).

23. (Currently Withdrawn) A method for transmitting packet data and side information including a sequence number of the packet data in a CDMA mobile communication system employing a HARQ scheme for performing retransmission in response to a retransmission request message after an initial transmission, comprising the steps of:

performing a first channel-processing of the packet data through a first transport channel and a first channel-processing of the side information through a second transport channel during the initial transmission;

multiplexing the first channel-processed packet data and side information and transmitting the multiplexed information over a common channel during the initial transmission;

performing a second channel-processing of the side information through the second transport channel and a second channel-processing of the user information through a third transport channel during the retransmission; and

multiplexing the second channel-processed packet data and side information and transmitting the multiplexed information over the common channel during the retransmission.

24. (Currently Withdrawn) The method as claimed in claim 23, wherein the common channel is a physical downlink shared channel (DSCH).

25. (Currently Withdrawn) The method as claimed in claim 23, wherein the second transport channel has a priority higher than a priority of the first and third transport channels.

26. (Currently Withdrawn) A method for transmitting packet data and side information including a sequence number of the packet data in a CDMA mobile communication system employing a HARQ scheme for performing retransmission in response to a retransmission request message after an initial transmission, comprising the steps of:

performing a first channel-processing of the packet data through a first transport channel and a first channel-processing of the side information through a second transport channel during the initial transmission;

multiplexing the first channel-processed packet data and side information and transmitting the multiplexed information over a common channel during the initial transmission;

performing a second channel-processing of the packet data through a third transport channel and a second channel-processing of the side information through a fourth transport channel during the retransmission; and

multiplexing the second channel-processed packet data and side information and transmitting the multiplexed information over a dedicated channel during the retransmission.

27. (Currently Withdrawn) The method as claimed in claim 26, wherein the common channel is a physical downlink shared channel (DSCH).

28. (Currently Withdrawn) The method as claimed in claim 26, wherein the dedicated channel is a dedicated physical channel (DPCH).

29. (Currently Withdrawn) A method for transmitting packet data and side information including a sequence number of the packet data in a CDMA mobile communication system employing a HARQ scheme for performing retransmission in response to a retransmission request message after an initial transmission, comprising the steps of:

performing a first channel-processing of the packet data through a first transport channel and a first channel-processing of the side information through a second transport channel during the initial transmission;

multiplexing the first channel-processed packet data and side information and transmitting the multiplexed information over a dedicated channel during the initial transmission;

performing a second channel-processing of the packet data and a second channel-processing of the side information through a third transport channel during the retransmission; and

multiplexing the second channel-processed packet data and side information and transmitting the multiplexed information over the dedicated channel during the retransmission.

30. (Currently Withdrawn) The method as claimed in claim 29, wherein the dedicated channel is a dedicated physical channel (DPCH).

31. (New) The method as claimed in claim 1, wherein the transmitting step comprises:

performing a first channel-processing of the packet data through a first transport channel and a first channel-processing of the side information through a second transport channel; and

multiplexing the first channel-processed packet data and the first channel-processed side information and transmitting the multiplexed first channel-processed information over the common channel.

32. (New) The method as claimed in claim 31, wherein the retransmitting step comprises:

performing a second channel-processing of the side information through the second transport channel and a second channel-processing of the packet data through a third transport channel; and

multiplexing the second channel-processed packet data and the second channel-processed side information and transmitting the multiplexed second channel-processed information over the dedicated channel.

33. (New) The method as claimed in claim 31, wherein the retransmitting step comprises:

performing a second channel-processing of the packet data through a third transport channel and a second channel-processing of the side information through a fourth transport channel; and

multiplexing the second channel-processed packet data and the second channel-processed side information and transmitting the multiplexed second channel-processed information over the dedicated channel.

34. (New) The method as claimed in claim 7, wherein the transmitting step comprises:

performing a first channel-processing of the packet data through a first transport channel and a first channel-processing of the side information through a second transport channel; and

multiplexing the first channel-processed packet data and the first channel-processed side information and transmitting the multiplexed first channel-processed information over the dedicated channel.

35. (New) The method as claimed in claim 34, wherein the retransmitting step comprises:

performing a second channel-processing of the packet data through a third transport channel and a second channel-processing of the side information through a fourth transport channel; and

multiplexing the second channel-processed packet data and the second channel-processed side information and transmitting the multiplexed second channel-processed information over the common channel.

36. (New) The method as claimed in claim 10, wherein the transmitting step comprises:

performing a first channel-processing of the packet data through a first transport channel and a first channel-processing of the side information through a second transport channel; and

multiplexing the first channel-processed packet data and the first channel-processed side information and transmitting the multiplexed first channel-processed information over the dedicated channel.

37. (New) The method as claimed in claim 36, wherein the retransmitting step comprises:

performing a second channel-processing of the side information through the second transport channel and a second channel-processing of the packet data through a third transport channel; and

multiplexing the second channel-processed packet data and the second channel-processed side information and transmitting the multiplexed second channel-processed information over the dedicated channel.

38. (New) The method as claimed in claim 36, wherein the retransmitting step comprises:

performing a second channel-processing of the packet data through a third transport channel and a second channel-processing of the side information through a fourth transport channel; and

multiplexing the second channel-processed packet data and the second channel-processed side information and transmitting the multiplexed second channel-processed information over the dedicated channel.

39. (New) The method as claimed in claim 36, wherein the retransmitting step comprises:

performing a second channel-processing of the packet data and a second channel-processing of the side information through a third transport channel; and

multiplexing the second channel-processed packet data and the second channel-processed side information and transmitting the multiplexed second channel-processed information over the dedicated channel.